

CLAIMS

I claim:

- Sub. #1
1. A safety system for a weapon, comprising:
a weapon having a handgrip, a trigger forwardly located from said handgrip;
a housing having a top, a bottom, a front, a back and a pair of sides;
said top of said housing being coupled to said weapon such that said housing is positioned in front of said handgrip;
said back of said housing having a spaced apart pair of substantially parallel elongate slots therein;
a pair of elongate guard plates, a first of said guard plates being slidably inserted into a first of said elongate slots, a second of said guard plates being slidably inserted into a second of said elongate slots;
said first and second guard plates being slidable between extended and retracted positioned;
wherein said guard plates are rearwardly extended from said back of said housing to substantially cover said trigger when said guard plates are positioned in said extended position to prevent a user's finger from being extendable in front of said trigger;
wherein said guard plates are extended into said back of said housing to uncover said trigger when said guard plates are positioned in said retracted position to permit a user's finger to be positioned in front of said trigger;
a motor for moving said guard plates between said extended and retracted positions;

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a computer being provided in said housing and in electrical communication with said motor;
said housing a communication port in electrical communication with said computer, said communication port being adapted for electrically connecting to an external computer for permitting input into said computer input data corresponding to an image of a particular user's fingerprints and handprints;
a scanner being mounted to said handgrip of said weapon and in electrical communication with said computer for obtaining an image of the fingerprints and handprints of a user grasping said handgrip and sending a corresponding signal to said computer corresponding to the obtained image;
said computer comparing said corresponding signal received from said scanner with said input data, wherein said computer activating said motor to move said guard panels to said retracted position when said corresponding signal matches said input data;
a motion detector for detecting motion being disposed in said housing, motion detector being electrically connected to said computer, said motion detector having an activation switch electrically connected to said computer, said motion detector activating said switch to activate said computer upon detection of motion of said housing by said motion detector.

2. The safety system of claim 1, wherein said housing has a rear portion rearwardly extending from said back of said housing adjacent said bottom of said housing, wherein said rear portion of

said housing has a spaced apart pair of substantially parallel elongate channels rearwardly extending from said back of said housing, a first of said elongate channels being positioned adjacent said first elongate slot of said back of said housing and a second of said elongate channels being positioned adjacent said second elongate slot of said back of said housing, said first elongate channel receiving said first guard plate, and said second elongate channel receiving said second guard plate.

3. The safety system of claim 1, wherein each of said guard plates has a toothed lower edge, wherein said motor has a pair of rotatable toothed wheels, one of said toothed wheels engaging said toothed lower edge of said first guard plate and the other of said toothed wheels engaging said toothed lower edge of said second guard plate, wherein rotation of said toothed wheels in a first direction by said motor thereby moves said guard plates towards said extended position, and wherein rotation of said toothed wheels in a second direction opposite said first direction by said motor thereby moves said guard plates towards said retracted position.

4. The safety system of claim 1, further comprising a trigger stop being pivotally mounted to said housing such that said trigger stop is positioned adjacent said trigger of said weapon, said trigger stop being pivotable between raised and lower positions, wherein said trigger stop has an upper portion extending behind said trigger to thereby prevent actuation of said trigger and thereby prohibit discharge of said weapon when said trigger stop is pivoted to said raised position, wherein said upper portion of said trigger stop is retracted into said rear portion of said housing to thereby permit

actuation of said trigger to discharge said weapon when said trigger stop is pivoted to said lowered position.

5. The safety system of claim 4, further comprising a solenoid having a retractably extendable actuating rod extending therefrom, said actuating rod being coupled to said trigger stop, wherein said extension of said actuating rod out of said solenoid by said solenoid pivots said trigger stop towards said raised position, wherein said retraction of said actuating rod into said solenoid by said solenoid pivots said trigger stop towards said lowered position.

6. The safety system of claim 1, wherein said computer is in electrical communication with said solenoid for selectively controlling retraction and extension of said actuator rod in and out of said solenoid, wherein said computer activates said solenoid to retract said actuator rod to pivot said trigger stop to said lowered position when said corresponding signal matches said input data.

7. A safety system for a weapon, comprising:
a weapon having a handgrip, a trigger forwardly located from said handgrip, and a trigger guard around said trigger, said trigger guard having a lower forwards break providing a passage through said trigger guard;
a housing having a top, a bottom, a front, a back and a pair of sides;
said housing having a rear portion rearwardly extending from said back of said housing adjacent said bottom of said housing;

said rear portion of said housing having an upper face lying in a plane between said top and bottom of said housing; said top of said housing being coupled to said weapon such that said housing is positioned in front of said handgrip, wherein said top of said housing has a pair of mounting holes for permitting extension of fasteners therethrough and into said weapon to couple said top of said housing to said weapon;

said back of said housing being positioned adjacent said trigger guard of said weapon, said rear portion of said housing being position adjacent said lower forwards break of said trigger guard;

said back of said housing having a spaced apart pair of substantially parallel elongate slots therein;

said upper face of said rear portion of said housing having a spaced apart pair of substantially parallel elongate channels rearwardly extending from said back of said housing;

a first of said elongate channels being positioned adjacent a first of said elongate slots of said back of said housing and a second of said elongate channels being positioned adjacent a second of said elongate slots of said back of said housing;

a pair of elongate guard plates, said first elongate channel receiving a first of said guard plates, and said second elongate channel receiving a second of said guard plates;

said first guard plate being slidably inserted into said first elongate slot, said second guard plate being slidably inserted into said second elongate slot;

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said first and second guard plates being slidable between
extended and retracted positioned;
wherein said guard plates are rearwardly extended from said
back of said housing to substantially cover said trigger
guard when said guard plates are positioned in said
extended position to prevent a user's finger from being
extendable through said trigger guard;
wherein said guard plates are extended into said back of said
housing to uncover said trigger guard when said guard
plates are positioned in said retracted position to permit
a user's finger to be extendable through said trigger
guard in front of said trigger;
each of said guard plates having a toothed lower edge;
a motor being disposed in said housing and having a pair of
rotatable toothed wheels, one of said toothed wheels
engaging said toothed lower edge of said first guard
plate and the other of said toothed wheels engaging said
toothed lower edge of said second guard plate;
wherein rotation of said toothed wheels in a first direction by
said motor thereby moves said guard plates towards said
extended position, and wherein rotation of said toothed
wheels in a second direction opposite said first
direction by said motor thereby moves said guard plates
towards said retracted position;
a trigger stop being pivotally mounted to said rear portion of
said housing such that said trigger stop is positioned
adjacent said trigger of said weapon;
said trigger stop being pivotable between raised and lower
positions;

wherein said trigger stop has an upper portion extending through said break in said trigger guard and behind said trigger to thereby prevent actuation of said trigger and thereby prohibit discharge of said weapon when said trigger stop is pivoted to said raised position;

wherein said upper portion of said trigger stop is retracted into said rear portion of said housing to thereby permit actuation of said trigger to discharge said weapon when said trigger stop is pivoted to said lowered position;

a solenoid having a retractably extendable actuating rod extending therefrom, said actuating rod being coupled to said trigger stop;

wherein said extension of said actuating rod out of said solenoid by said solenoid pivots said trigger stop towards said raised position;

wherein said retraction of said actuating rod into said solenoid by said solenoid pivots said trigger stop towards said lowered position;

a computer being provided in said housing and in electrical communication with said motor and said solenoid for selectively controlling rotation of said toothed wheels in said first and second directions and controlling retraction and extension of said actuator rod in and out of said solenoid;

a first battery power source being provided in said housing and in electrical communication with said computer, said motor, and said solenoid;

said bottom of said housing having a removable access panel for providing access to said first battery power source;

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a voltage detector being disposed in said housing and being electrically connected to said first battery power source for detecting voltage across said first battery source, said voltage detector having a pair of light sources electrically connected thereto, one of said light sources being mounted on one of said sides of said housing, the other of said light sources being mounted to the other of said sides of said housing;

said voltage detector illuminating said light sources when said voltage detector detects a voltage across said first battery power source less than a predetermined voltage;

said front of said housing a communication port in electrical communication with said computer, said communication port being adapted for electrically connecting to an external computer for permitting input into said computer input data corresponding to an image of a particular user's fingerprints and handprints;

said computer having computer memory electrically connected thereto for storing said input data;

said computer having a second battery power source electrically connected to said computer memory for maintaining storage of said input data in said computer memory, said second battery power source being positioned adjacent said access panel;

a scanner being mounted to said handgrip of said weapon and in electrical communication with said computer for obtaining an image of the fingerprints and handprints of a user grasping said handgrip and sending a corresponding signal to said computer corresponding to the obtained image;

said computer comparing said corresponding signal received from said scanner with said input data, wherein said computer activating said motor to rotate said toothed wheels in said second direction to move said guard panels to said retracted position and activating said solenoid to retract said actuator rod to pivot said trigger stop to said lowered position when said corresponding signal matches said input data;

a motion detector for detecting motion being disposed in said housing, motion detector being electrically connected to said computer, said motor and said solenoid, said motion detector having an activation switch electrically connected between said first battery power source and said computer, motor, and solenoid;

said motion detector activating said switch upon detection of motion to thereby provide energy to said computer, motor and solenoid from said first battery power source; and

said motion detector deactivating said switch upon the absence of detection of motion for a predetermined elapsed amount of time.